

lateral lobes very narrow, the basal ones nearly at right angles to the middle lobe; summer leaves several-lobed, the middle lobe longest and largest; flowers large, pale blue in color (Gilmerton, No. 4857, April 20, 1912).

This hybrid has some resemblance to the hybrid between *Viola Brittoniana* and *emarginata*, first found in the District of Columbia, and figured in *Rhodora* (pl. 71) in 1906. It lacks, however, the stoutness of that plant, and in its more slender habit shows its relationship to *Viola septemloba*. The name "*Viola emarginata* × *septemloba*" has been previously used for a hybrid between *Viola emarginata* and *Viola Brittoniana* by Ezra Brainerd (*Rhodora* 8: 53. 1906). Dr. Brainerd at that time regarded *Viola Brittoniana* as identical with the more southern *Viola septemloba*, a position from which he has since receded.

#### VIOLA VILLOSA Walter

This southern species has not been previously reported from Virginia. It is quite common near Gilmerton on bushy cut-over land used as a pasture, the soil being very sandy (No. 5079, April 19, 1913).

## REVIEWS

### Two recent works on the marine algae\*

The publication, during the past summer, of Professor Bradley Moore Davis's studies of the marine algae of the Woods Hole region marks an important forward step in the study of the American algae. In the first part of this work the marine flora as a whole and the various associations of species are discussed from the biological or ecological point of view. After an introductory chapter, the author discusses some of the factors

\* Davis, Bradley Moore. A biological survey of the waters of Woods Hole and vicinity. Part I. Section II. Botanical. General characteristics of the algal vegetation of Buzzards Bay and Vineyard Sound in the vicinity of Woods Hole. Bull. Bur. Fisheries 31: 443-544. charts 228-274. 1913; Part II. Section IV. A catalogue of the marine flora. Bull. Bur. Fisheries 31: 795-833. 1913.

Weber-van Bosse, A. Liste des algues du Siboga. I. Myxophyceae, Chlorophyceae, Phaeophyceae, avec le concours de M. Th. Reinbold. Siboga Expeditie, Monographie 59a: 1-186. f. 1-52 + pl. 1-5. S 1913. E. J. Brill, Leiden. 4to.

affecting the local distribution, such as the nature of the coast and of the bottom in deeper water, the tides and tidal currents, the effects of ice, depth of water, light, temperature and seasonal changes, and salinity of the water. In the third chapter, the characteristic algal associations and formations are described and analyzed. A chapter of remarkable interest and value concerns the algae of Spindle Rocks, a group of ten boulders at one of the entrances to the ship channel at Woods Hole. The flora of these rocks was under a more or less continuous observation during a period of fifteen months and the seasonal variation in their flora is shown with great clearness by a series of eight charts. It is to be hoped, as the author suggests, that this record of interesting results may stimulate others to make similar sustained and intensive studies of the flora of other limited areas. The first part of Professor Davis's paper closes with an account of the distribution of the marine algae in the deeper waters, the flora of certain inshore regions of peculiar interest, and with a series of charts illustrating the distribution of thirty-eight of the more common and characteristic species of the region.

The catalogue of species, which comprises the second part of Davis's work, includes full details as to distribution and seasonal occurrence and cites the specimens and records on which his own records are based. The number of species recognized is 240. The nomenclature of the list is of the current sort. A recent reviewer, Mr. F. S. Collins, has commended it as "conforming to the Vienna Rules,"\* which is possibly true of it, to a certain degree. However, as Mr. Collins himself has more recently† hinted, the use of Farlow's specific name *Bornetiana* for our common *Griffithsia* is obviously in violation of the Vienna Rules. It may be added that the specific name of our handsome red alga currently known as *Dasya elegans* is evidently, under the Vienna Rules, *pedicellata*, the type of the species being a specimen from New York sent to the elder Agardh by John Torrey. And *Phyllitis*, under the Vienna Rules and the Brussels

\* *Rhodora* 15: 152. 11 Au 1913.

† *Science* II. 38: 597. 24 O 1913.

Amendments, is the legal name for a genus of ferns and as such is enjoying wide usage. A careful scrutiny would doubtless disclose other less obvious and less well-known violations of the Vienna Rules. But these are minor details and, rules or no rules, the nomenclature adopted by Professor Davis has the great and saving virtue of being readily intelligible.

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Part I of Mme. Dr. A. Weber-van Bosse's "Liste des algues du Siboga," which appeared in September last, includes the Myxophyceae [Cyanophyceae], Chlorophyceae, and Phaeophyceae. It is based chiefly on specimens obtained in the Dutch East Indies in 1899-1900 by the scientific expedition under the leadership of Professor Max Weber, of the University of Amsterdam, the husband of the talented authoress of the "Liste." "Siboga" was the name of the Dutch cruiser used on that voyage of exploration and the present paper is a part of one of the sixty-six memoirs or monographs, for the most part already published, in which the scientific results of this expedition are made known. A part of the ground covered by the present "Liste" has been included in more detail by the general monograph of the genus *Halimeda* by Miss E. S. Barton (Mrs. A. Gepp), constituting monograph 60 of the Siboga series, the general monograph\* of the family Codiaceae by A. and E. S. Gepp, constituting monograph 62 of the series, and preliminary papers by Mme. Weber-van Bosse on *Dictyosphaeria*, etc. In addition to the material secured by the Siboga Expedition, the present "Liste" takes into consideration also specimens collected by Mme. Weber-van Bosse in an earlier visit to the Dutch East Indies (in 1888) and certain specimens sent to her by other collectors. The treatment of the genera *Boodlea*, *Cladophora*, *Cladophoropsis*, *Microdictyon*, *Rhizoclonium*, and *Struvea*, among the green algae, and of *Sargassum* among the browns, has been contributed by Major Th. Reinbold. His parts of the work are published in German, while Mme. Weber's are in French.

In the treatment of the Myxophyceae, written by Mme.

\* Reviewed in *Torreyana* 11: 133-137. Je 1911.

Weber-van Bosse, one notes the proposal of several new species and of one new genus, *Herpyzonema*, of the family Stigonemataceae.

The points of contrast between the marine flora of the East Indies and that of the West Indies are perhaps nowhere more obvious than in the order Siphonales of the Chlorophyceae. Of the twenty-five species of the genus *Caulerpa*, here attributed to the Dutch East Indies, ten occur also in the seas of tropical and subtropical America. Among the Siphonales of West Indian affinities, one notes that *Acetabularia caraibica* Kützing is maintained as a valid species. Through the courtesy of Mme. Weber-van Bosse, the present reviewer,\* about a dozen years ago, examined most of the original materials on which this species was based and he expressed the opinion that they could not be satisfactorily distinguished from *Acetabularia crenulata* Lamour., described forty years earlier, the type of this also coming from the Antilles. This view of *A. caraibica* has since been adopted by Mr. F. S. Collins† and by Dr. Börgesen,‡ both of whom have enjoyed good opportunities for knowing the West Indian plants of this genus. The types of both of the alleged species being West Indian, the question of their validity or identity is essentially a West Indian rather than an East Indian question. Among the Siphonales is a new genus *Bryobesia* Weber-van Bosse, first published, however, two or three years earlier, but now illustrated and described in more detail.

Among the Phaeophyceae, Madame Weber uses "*Ilea* (Fr.) Nordstedt" for the genus currently known as *Phyllitis*, which name, as remarked in the preceding review, legally belongs to a genus of ferns. The name *Ilea* was first used by Fries for a genus of Chlorophyceae and as such is in current usage. Under the prevailing European rules of nomenclature, the taking up of *Ilea* for a genus of brown algae may possibly be justifiable, in spite of the confusion that it would entail, but the earlier use of *Ilea* in an entirely different sense happily forbids any such *boule-*

\* Bull. Torrey Club 28: 331-333. 1901.

† The green algae of North America 378. 1909.

‡ The marine algae of the Danish West Indies 80, 81. 1913.

versement under the "rejection of homonyms" principle of the "American Code." It seems to the reviewer that *Petalonia* Derb. & Sol. is the right name for the genus of algae commonly known as *Phyllitis*.

*Mesospora* Weber-van Bosse is a genus of Ralfsiaceae, published in a preliminary way a few years earlier, but now illustrated and more fully described.

Major Reinbold, in his treatment of the genus *Sargassum*, recognizes forty-five species, of which three are proposed as new. In striking contrast to the genus *Caulerpa*, the forty-five East Indian species of *Sargassum* appear to include only one, *S. bacciferum*, that occurs also in the West Indian region. In connection with *S. bacciferum*, the author, by the way, quotes J. Agardh's statement that attached and fructiferous plants of this species occur "in rupibus extra New Foundland"—a statement that, in all probability, rests upon some sort of error.

This first part of the "Liste des algues du Siboga" is illustrated by fifty-two text figures and five handsome plates. The appearance of the second part of this important work, to include the Rhodophyceae, will be awaited with much interest.

MARSHALL A. HOWE

**Wilson's A Naturalist in Western China\***

When, in 1859, Asa Gray brought out his now famous paper on the relationship of the Japanese flora to that of eastern North America, it is doubtful if he realized how completely that idea was to be supported by a man who was to explore the interior of China more than fifty years later. As we now know, many of the plants mentioned by Gray as of Japanese origin were only introduced into Japan from China, and his paper must be construed today as an attempt to explain the very close relationship between the flora of eastern North America and eastern Asia.

More than any living botanist, Mr. E. H. Wilson has made it

\* Wilson, E. H. A naturalist in western China with vasculum, camera and gun. With an introduction by C. S. Sargent. Vol. 1. pp. i-xxxvii+1-251. Vol. 2. pp. 1-229. 101 illustrations and map. New York. Doubleday, Page & Co. 1913. Price \$7.50.